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FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

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PURPURA HÆMORRHAGICA.

Last week Mr. W. G. Blackwell published a very interesting case which opened up the question—Is the dog ever affected with purpura hæmorrhagica? Most practitioners would probably reply in the negative. We are all very familiar with the disease in the horse; and some reports have been published which at least suggest that it may affect cattle; but very little has yet been published bearing upon its occurrence in the dog, and that little is hardly convincing. On the Continent three cases have been recorded—one by Raitsits and two by Lellman—some details of which are given in Hutyra and Marek's text book. All these ended fatally, and all that can fairly be said of them is that clinically and anatomically they showed considerable resemblance to purpura hæmorrhagica. Mr. Blackwell's case, which appears to have recovered, is of the same category; but Mr. Blackwell himself indicates several points—the absence of swellings, of marked depression, and of any previous debilitating disease—which undoubtedly are objections to the diagnosis of purpura. They would be very strong ones, were it not for the fact that the symptomatology of many diseases varies with the species of animal attacked. As it is, they combine with the paucity of existing records to render the case a doubtful one.

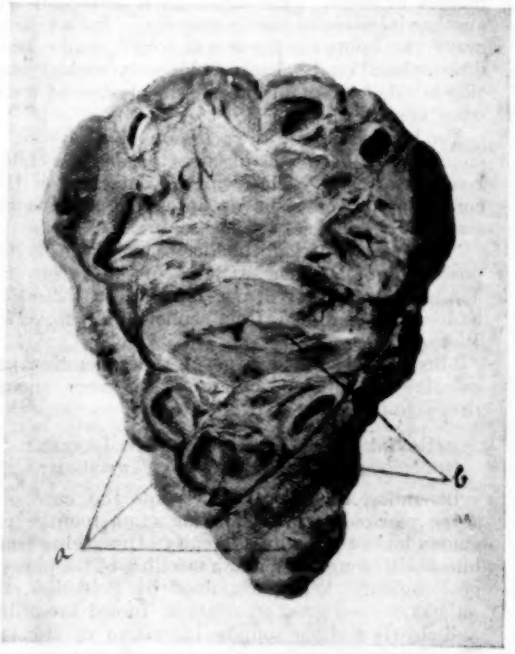
Many other diseases have offered us, or still offer us, the same problem—do they occur in species of animals which are certainly not usually affected by them? Tuberculosis, tetanus, black quarter, and variola are only a few examples. This particular question is not perhaps a very important one, but still it is novel and interesting. We cannot expect it to be answered from the laboratory until pathologists have succeeded in elucidating the etiology of purpura in the horse. But in the meantime the experience of clinicians might help us a little—if it were forthcoming.

THE SOCIETIES.

More than one of our Societies have suspended their meetings in consequence of the war, and probably others will soon follow suit. Some, we know, will find it impossible to meet; but it is to be hoped that every Society that can hope to muster a gathering will meet as usual. "Business as usual" should be the motto of those of us not actually engaged in the national service—and one part of our business should certainly be the maintenance of the Societies which have helped us so much.

POLYCYSTIC KIDNEY IN A BUFFALO.

In holding an autopsy on the carcase of a buffalo, which had died from rinderpest in this hospital some time ago it was observed that besides the usual morbid lesions of cattle-plague in it, the left kidney of the animal was hypertrophied; comparatively large and very nodular in shape; while on section the organ exhibited multiple cysts of varying sizes, situated between the cortex and its pyramids. These sacs were filled with a thin yellowish fluid and well isolated from one another by septum of greyish-white interstitial tissue, with compressed renal parenchyma in some of them.



The animal which was an aged one, had no cystic or dropsical affection of any other organ, and this complaint which may have been "congenital" or "acquired" remained unsuspected during life. The cystic degeneration of the kidneys though not uncommon in human beings, seems to be somewhat rare in the lower animals.

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ABSTRACTS FROM FOREIGN JOURNALS.

Constipation-Colic in Consequence of an Intestinal Calculus.

Schaidler, of Ismaning, records the following case. An eight-year-old gelding had been showing colicky symptoms for three hours without very great pain. Often he would lie for a long time quite quietly. Peristaltic sounds were suppressed on both sides of the abdomen; but from time to time single balls of fæces were passed. Rectal exploration showed that the intestines accessible to the hand were tightly filled with masses of fæces.

Constipation-colic was therefore diagnosed; and eserin-arecolin was injected. Castor oil was given in addition, and repeated clysters of water were ordered.

Twelve hours later Schaidler again saw the horse, and found him neither better nor worse. Rectal exploration gave the same result as before. As the clinical appearances did not indicate a displacement of the intestines, Schaidler attributed the illness to obstruction of the intestine by large hard masses of fæces. He again gave castor oil and another injection of eserin-arecolin. In addition, every two hours the horse was bound while lying down, placed on his back, and gently rocked from side to side for ten minutes. The clysters of water were continued.

Ten hours later, on the occasion of a clyster, a concretion of hard balls of fæces the size of a child's head was passed. The centre or nucleus of this concretion proved to be an intestinal calculus the size of a child's fist.

At an earlier period, the horse had been in the possession of a miller. Since passing into the hands of his present owner some months before he had never suffered from colic.—(*Munch. Tier. Woch.*)

[Presumably the passage of the concretion and calculus was followed by a quick recovery, though that is not directly stated.—*Transl.*]

Bovine Actinomycosis of the Larynx: Successful Employment of Tracheotomy.

Schaidler, of Ismaning, records the case of a seven-year-old cow, which for some months had shown loss of appetite, difficulty of breathing (combined with coughing), and a swelling of the pharyngeal region. When examined by Schaidler, the animal showed great emaciation, forced breathing, and clearly audible sounds indicative of stenosis. The laryngeal region was considerably swollen; and the larynx itself, when pressed upon, was quite devoid of elasticity.

As no pathological lesions could be demonstrated in the lungs, and as the poor condition of the animal rendered slaughter unprofitable, Schaidler advised tracheotomy. This was done, with the result that the appetite immediately improved, the milk yield rose in a short time up to 8 litres (= 14 pints), and, four months later, the cow could be sold for slaughter in moderately good condition. After slaughter, it was found that the larynx was affected with actinomycosis to a high degree. —(*Munch Tier. Woch.*)

Actinomycosis Involving the Spinal Cord.

Wimmer, of Aichach, reports the case of a two-year-old heifer, who was stated to be always very "full" and stiff, and, despite feeding upon green food, always to have difficult defecation. Examination revealed nothing definite; and so Wimmer ordered small doses of neutral salts, to be continued for a considerable period. Three weeks later he was again called to the animal. In the meantime she had become emaciated, showed complete loss of appetite and great pain, and could only stand up when supported. Wimmer advised slaughter.

Post-mortem examination revealed the existence of very far advanced actinomycosis of the inner sides of both rami of the inferior maxilla. This condition had not been perceptible to external examination. In addition, there was an actinomycotic growth the size of a walnut, easily separable from the surrounding tissues, in the last dorsal vertebra. This growth was pressing directly upon the spinal cord, which it had reduced at that point almost to non-existence.—(*Münch. Tier. Woch.*)

Sennatin in Equine Colic.

Sennatin, an extract of senna leaves, has already been used with success in equine colic. Jacks now records (*Zeitschrift f. Vet.*) favourable results in two cases.

Both horses were very ill from impaction of the large intestine, with a moderate degree of tympanitis. In both, Jacks followed the same treatment. First, as a calmative, he gave 30 grammes (= nearly ʒj.) of chloral hydrate in linseed mucilage by the mouth. This was followed up by a single subcutaneous injection of 20 grammes (= about ʒv.) of sennatin.

After two or three hours, the horses showed brisk peristaltic sounds on both sides of the abdomen, with the escape of intestinal gases—the latter only to a moderate degree at first, and in considerable amount later. After four hours, defecation followed, at first in small and then in greater quantity. The animals both showed appetite again, and recovered.—(*Münch. Tier. Woch.*)

W. R. C.

Report of the Chief Veterinary Surgeon, Southern Rhodesia, for the Year 1913 [Abstract].

For another year it has to be recorded that the most important work which engaged the attention of the officers of the Veterinary Department was in connection with African Coast Fever. The recrudescence of this disease on several old centres of infection, after various periods of apparently entire immunity, caused no little uneasiness amongst the cattle owners of the districts immediately concerned. Nevertheless, the position at the close of the year is more favourable than for several years past, because the infection has been restricted to these outbreaks, and the formerly large infected area around Bulawayo is now reduced to two

centres only on which disease occurred during the year. In other respects the territory is remarkable free from disease of an epizootic nature.

In addition to dealing with the scheduled infective diseases of animals, the work of the Department includes: (1) The control, by means of permits, of all cattle movements; (2) the supervision of cattle dipping tanks at the centres where public tanks have been constructed, and on various areas where dipping for coast fever purposes is compulsory; (3) the supervision of the areas established for slaughter cattle at the larger centres; (4) the application of the tuberculin test to all animals imported from countries other than the Union of South Africa; (5) the application of the mallein test to all equines imported; (6) the general inspection of all animals imported; (7) the inoculation against redwater and gallsickness of imported susceptible animals; (8) advice and assistance to farmers on stock matters generally.

African Coast Fever.

During the year six outbreaks occurred, and a total mortality of 172 head, compared with five outbreaks and a total mortality of 505 during the previous year.

Umtali District. At the beginning of the year one infected centre existed, viz., the Umtali commonage, on which the last case of Coast Fever occurred in March, 1912. No further cases were recorded, and the area is now regarded as clean.

In October smears from a calf on the Jelf estate showed Koch's bodies. This animal showed no temperature and no symptoms of ill health, and smears taken subsequently proved negative. It was afterwards destroyed by the owner, and post-mortem and microscopic examination showed no signs of coast fever. The herd has been kept under constant observation, but no further suspicions of coast fever have been detected. As the presence of the microscopical bodies known as "Koch's" or "blue bodies" is generally regarded as conclusive evidence of coast fever, it is difficult to explain their casual occurrence in a calf belonging to a herd which has been free from this disease for ten years. I am inclined to think that in such cases there has been an error somewhere, perhaps in observation, or more likely in the mixing or misplacement of the preparations from which the diagnosis was made. At any rate, until more definite evidence of the existence of coast fever is forthcoming in this case its existence will not be declared.

Goromonzi (Salisbury) District. From the previous year one centre of infection remained, viz., a portion of the northern section of Salisbury commonage. No fresh cases occurred during the year, although the animals were not removed from the veld on which the disease occurred. The total loss in the herd affected was two small calves only.

Four fresh outbreaks occurred, viz.—(1) Grange farm, eight miles east of Salisbury; (2) Hatfield estate, adjoining the Salisbury commonage on the south; (3) Southern section of the Salisbury commonage; (4) Hayden farm, 12 miles west of Salisbury.

At the first-named centre several calves were reported ill on 1st January, and post-mortem examination in one instance revealed lesions of acute redwater and anaplasmosis only. Veterinary surgeon White, in inspecting the herd, noticed a two months' old calf with enormously enlarged glands, those below the ears especially attracting attention; in other respects the animal appeared perfectly healthy. Smears taken from one of the glands showed the presence of innumerable Koch's bodies. The calf was isolated and blood and gland smears examined daily. The Koch's bodies persisted until death, but no *T. parva* was detected in the blood at any time. Post-mortem examination showed most characteristic lesions of coast fever, especially in the kidneys, which were profusely infarcted. The farm was fenced immediately, and the herd sprayed every third day, until the completion of the dipping tank. No further cases occurred, and the quarantine was raised at the end of the year.

Bulawayo, Umzingwane and Matobo Districts. At the beginning of the year there were eight areas regarded as infected, and no fresh outbreaks occurred. On 1st May four of the areas referred to were released from quarantine, after a period of at least 15 months' freedom from disease. At the remaining four areas, disease occurred at two only during the year.

Bubi District. No fresh cases occurred on the single farm infected in this district during the previous year, and after the usual period it was released from quarantine.

On reference to the schedule, it will be seen that 164 deaths out of a total number of 172 occurred at three centres, viz., N'Odzi, Hatfield Estate and Collaton. In the two former, the disease had existed for a considerable period prior to the discovery, consequently the veld was grossly infected, and, as there were no suitable clean areas to which the herds could be moved, we were compelled to allow them to remain, and endeavour to eliminate the disease by three-day dipping and the destruction of all animals showing a suspicious rise of temperature. The results did not prove satisfactory. The disease still persists at N'Odzi, and the Hatfield herds were slaughtered, as there seemed to be little prospect of saving any. At Collaton twelve animals were destroyed during the first five months of the year, since when no further cases have occurred. This outbreak occurred in February, 1912, and during that year 409 animals succumbed. It would appear, therefore, that the eradication of infection is within sight.

The heavy mortality and the persistence of infection in the N'Odzi and Hatfield outbreaks caused a good deal of adverse comment on short-interval dipping as a means of dealing with cattle on infected veld, and also of dipping as a general preventive measure, because in the former case it had been, or was alleged to have been, practised for some years previous to the outbreak. As a preventive measure, dipping is of little or no value, unless regularly carried out in a solution of proper strength, which certainly was not done at N'Odzi for at least twelve months previous to the discovery of the outbreak. That it is not an absolute preventive is evident from the Mabonda outbreak, where the animals had been dipped every third day in a solution of proper strength, for several months previous to the outbreak. It is more than certain, however, that but for its consistent application before and after the appearance of the disease, the loss would not have been restricted to one beast.

Apart from the question of dipping as a general preventive measure, its efficacy in dealing with herds running on infected veld depends to a very large extent on the degree of infection which exists when the outbreak is discovered, and the short-interval dipping policy initiated. Where gross infection exists, the losses are invariably heavy, and the eradication of infected ticks a slow process, but where the first case of disease has been detected and dipping immediately practised, the results have been highly satisfactory, *e.g.*, the Grange and Hayden outbreaks, where the loss was restricted to one beast in each case.

Early in January the weekly dipping of upwards of 30,000 head of cattle in and around the infected and suspected areas in the Bulawayo, Bubi and Umzingwane at Matobo districts was begun, and carried on until the beginning of the winter season. This measure has undoubtedly contributed to the very satisfactory position which now obtains in Matabeleland, viz., two infected

centres only, one of which has been free from disease for over ten months and the other for over seven months.

It is satisfactory to be able to record a substantial increase in the number of dipping tanks in the territory. The total number in use is now over 370.

Bovine Plasmoses.

The direct and indirect losses caused amongst cattle imported from the Union of South Africa and overseas by the diseases included under this term, viz., piroplasmosis or redwater and anaplasmosis or gallsickness, continue to be a serious drawback to the stock-raising industry. Amongst locally-bred graded cattle, too, the losses are considerable, compared with those of pure native or Africander strains. It is impossible to obtain statistics in regard to the mortality amongst Colonial-bred animals, but it is certainly well over 10 per cent.

In addition to the losses from inoculation, several animals died from acute redwater on exposure to veld infection, showing that little or no immunity to this disease was conferred by the inoculation. Amongst the animals imported from overseas during the year and not inoculated several deaths have occurred to date from redwater and gallsickness. In all cases the animals are carefully looked after, and either stabled or confined to enclosures to avoid, as far as possible, tick infection. They are also regularly dipped or washed. These results so far are most encouraging, and show that by careful management it is possible to prevent susceptible animals contracting either disease. The facilities for attaining this result are, however, generally beyond the means of the average farmer.

No outbreaks of either anthrax or lungsickness (contagious pleuro-pneumonia of bovines) occurred during the year.

One outbreak of black quarter or quarter evil on a farm in the Umtali district was recorded. Only one death occurred.

Two outbreaks of tuberculosis in cattle were dealt with during the year. In the first case, post-mortem on an aged cow purchased on the Gwelo stock sale a short time before death showed lesions of advanced tuberculosis. On enquiry, it was found that this animal had been in the possession of the vendor for four years. The examination of the animals in this herd and the application of the tuberculin test failed to locate any further cases. The second outbreak occurred in the Nyamandhlovu district in a herd of well-bred animals. The first case detected was in an imported cow which had been on the farm for several years. Post-mortem shewed marked lesions of tuberculosis. The incontact animals were tested with tuberculin, and two reacted, post-mortem examination in each case showing tuberculosis. All the cattle imported from overseas during the year were tested with tuberculin. Two reacted and were destroyed.

In the Hartley district there was a considerable increase in the number of cattle affected with trypanosomiasis, compared with the previous five or six years. This is probably due to the large increase in the number of cattle in the district, and to the use of oxen in opening up certain areas for mining purposes. As far as can be judged, there was no increase in the numbers of tsetse fly in the Hartley and Gatooma areas, and no extension of the areas infected by them. In the Lomagundi district a serious extension of tsetse fly areas is reported.

A marked decrease in the prevalence of Rabies has to be recorded. Only one confirmed outbreak occurred during the year, viz., in Salisbury township, where four dogs and one ox were destroyed. One suspected case was reported from Umvuma and two from Victoria. This improvement in the position, as compared with previous years, I attribute to the application of the Dog Tax Ordinance, which has resulted in an enormous diminution of native dogs throughout the Territory.

The Territory remains free from Glanders. During the year the following animals were tested with mallein on importation:—Horses, 1000: mules, 741; donkeys, 2495. Three horses re-acted. Post-mortem examination in each case showed lesions of glanders.

Rinderpest.

Early in the year the Assistant Chief Veterinary Surgeon was despatched to German East Africa, with the permission of the Governor of that Territory, in order to make direct enquiry into the conditions in regard to rinderpest. He was received with every courtesy, and given every facility and information in prosecuting his enquiries, for which we are greatly indebted to the officials of that administration. The disease is being combated on scientific lines by a large and well-equipped Veterinary Department, and it is most satisfactory to learn that during the last twelve months the disease has not extended southwards. At the same time, it must be stated that until it is entirely stamped out it is a danger to the territories to the south. A Conference of Veterinary Officers was convened by His Excellency the High Commissioner, and met in Bulawayo in April, to consider Mr. Edmond's report, and what steps were necessary to prevent the disease spreading to any of the adjoining territories, and the means to be adopted in dealing with it should it unfortunately invade such territories. The Conference was attended by delegates from the following Administrations:—The Union of South Africa, Swaziland, Basutoland, Bechuanaland Protectorate, Nyasaland, Portuguese East Africa, Mozambique Company's territory, Belgian Congo, British East Africa, and Northern and Southern Rhodesia, and after four days' deliberations, the following statement was submitted:—

"The members of the Veterinary Conference, called together at Bulawayo at the request of His Excellency the Governor General, desire to place on record their appreciation of the courtesy shown and the facilities afforded by the Administration of German East Africa to Assistant Chief Veterinary Surgeon Edmonds on the occasion of his recent visit to that territory, for the purpose of obtaining information regarding the spread of rinderpest.

"The Conference has carefully considered the report of Mr. Edmonds, and, after consultation with the various veterinary officers whose territories are most directly concerned, is of the opinion that the danger of the disease extending southwards is such that they are warranted in making the following recommendations to the various Administrations represented at the Conference and affected by the present situation, and urge that no time be lost in giving effect thereto.

"The recommendations regarding the supply of serum was based upon an offer of assistance by the British East Africa Administration, conveyed by its Chief Veterinary Officer, Mr. R. J. Stordy, which is as follows:—

"'In view of the danger of the spread of rinderpest to the South African States, my Government is prepared to supply up to 250,000 doses per annum of anti-rinderpest serum at the approximate rate of one rupee per dose, providing always that susceptible cattle are available from the Western Province of Uganda, that laboratory assistance is given to the Veterinary Pathologist by the States concerned, and that the cost of production of the serum required is met in such a manner that it does not appear in the Estimates of the Protectorate.'

Recommendations:

"1. That the various Governments mentioned below establish reserves of serum of the amount indicated in this schedule, and obtain their supplies by subsidies

to the Administration of British East Africa:—Northern Rhodesia, 20,000; Nyasaland, 20,000; Portuguese East Africa, 15,000; Mozambique Company, 10,000; Union of South Africa, 40,000; Bechuanaland Protectorate, 10,000; Belgian Congo, 1000; Southern Rhodesia, 50,000.

"2. That applications for serum from the German East Africa Administration to British East Africa receive prior consideration, until each time as the former is in a position to supply its own requirements, or until the disease spreads beyonds its borders.

"3. That in the event of German East Africa requiring additional veterinary assistance for the purpose of combating rinderpest, the States represented at this Conference offer to assist, by seconding professional officers for duty in that territory.

"4. That if rinderpest invades any of the territories adjoining German East Africa, the Government of the territories more remotely concerned render them all veterinary assistance within their power, including contributions of serum.

"5. That, on account of the vital importance of the early discovery of outbreaks of rinderpest, those States bordering on German East Africa which are insufficiently provided with veterinary assistance strengthen their staffs without delay, and that not less than two veterinary officers be stationed on the German East Africa border, between Lakes Tanganyika and Nyasa, for the purpose of watching the situation.

"The Conference desires to direct special attention to the dearth of veterinary surgeons in the Bechuanaland Protectorate, which places that territory at a great disadvantage, and in a position of extreme danger, should the disease extend further southwards.

"6. That States engaging new veterinary assistants, or whose present veterinary officers are not intimately acquainted with rinderpest, send officers to some centre where they can have the opportunity of studying the disease in its present manifestations.

"7. That the Nyasaland Administration establish a cattle-free belt along the German East Africa border, similar to that which is being cleared in Northern Rhodesia, and that joint arrangements be made by those administrations for the patrolling of the belt, the approximate length of which is 250 miles.

"8. In all territories in which regulations are not in force prohibiting the unauthorised use or removal of blood, bile, or any other material liable to convey rinderpest, such regulations be promulgated without delay.

"9. That in the event of the disease invading Northern Rhodesia, in spite of the efforts made to arrest its spread, and before reserves of serum have been furnished by the British East Africa Administration, immediate arrangements be made for the establishment of a serum station at some point in proximity to the railway in Northern Rhodesia, and the Government which is in the best position to supply staff and equipment for such a station undertakes its management."

As far as the recommendations of the Conference concern this Territory, they are being given effect to, by providing a reserve of anti-rinderpest serum, and sending members of the Veterinary Staff to British East Africa to enable them to become conversant with rinderpest, and the materials and measures used in combating it.

J. M. SINCLAIR,
Chief Veterinary Surgeon.

DISEASES OF ANIMALS ACTS 1894 TO 1911, SUMMARY OF RETURNS.

Period.		Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange.		Sheep Scab.	Swine Fever	
		Outbreaks (a)	Animals.	Outbreaks (a	Animals.	Outbreaks (b)	Animals.	Outbreaks (b)	Animals.	(b)	Outbreaks (a)	Slaughtered. *
GT. BRITAIN. Week ended Sep. 26		9	12			2	17	4	4		94	593
Corresponding week in	1913 ...	9	9					23	41	1	32	610
	1912 ...	5	5	3	44	4	8	12	14	2	27	445
	1911 ...	20	24	1	16	5	22			1	33	374
Total for 39 weeks, 1914		557	612	22	108	82	254	1547	2682	155	3157	31068
Corresponding period in	1913 ...	411	453			121	238	1999	3999	134	1868	24987
	1912 ...	594	675	81	633	139	256	2415	5189	177	2345	30997
	1911 ...	648	903	9	441	153	368			311	1921	22347

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked: Essex 1, London 1.
Board of Agriculture and Fisheries, Sept. 29, 1914

IRELAND. Week ended Sep. 26		...	...	...	...	...	...	Outbreaks ...	7	...	1
Corresponding Week in	1913 ...	...	...	...	...	...	...	...	4	3	28
	1912 ...	...	...	1	2	...	...	...	1	3	9
	1911 ...	...	...	...	...	...	...	...	4	2	57
Total for 39 weeks, 1914 ...		1	1	76	955	...	...	67	407	161	837
Corresponding period in	1913 ...	...	...	...	...	...	...	102	394	116	721
	1912 ...	3	3	29	263	...	...	53	266	186	1517
	1911 ...	7	14	...	...	2	3	52	265	104	1765

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Sep. 28, 1914
NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection

The Soy Bean.

The following extracts are from a report on the soy bean, from both the cultural and commercial sides, prepared by Mr. A. Grenville Turner :—

"The soy bean (*Glycine hispida*) is a leguminous plant, native of south-eastern Asia. De Candolle states that it originally occurred in the wild state in the region, from Cochin China to the south of Japan and to Java." It has been cultivated from very ancient times. It is a very important food plant in some countries, notably China, Japan, and Manchuria; and its cultivation has reached such an advanced stage that innumerable varieties and forms have been developed.

It is supposed to have been used for food in China even before the time of Confucius. Although it has been grown in China and Japan for such an extended period, its cultivation seems to have spread very slowly to the surrounding countries. Its introduction into India seems to have taken place in comparatively modern times.

Up to the year 1907 the export of soy beans from Manchuria did not exceed 120,000 tons, of which the bulk was absorbed by Japan. The development of Manchuria as the result of the Russo-Japanese war is responsible for the huge supplies of beans exported to Great Britain and the Continent of Europe. As a commercial oilseed, however, the soy bean was undoubtedly first introduced to the notice of the British and Continental manufacturer towards the end of the year 1908, when the export commenced to Europe through Vladivostock; the cargo was nearly all carried in British bottoms, and destined to oil mills in the United Kingdom.

The soy bean which is effecting a commercial revolution in Europe is an erect, annual plant, with branching, hairy stems, trifoliate, more or less hairy leaves, rather inconspicuous pale lilac or violet-coloured flowers, and broad, three to five-seeded pods, covered, like the stem, with stiff hairs. The seeds vary in colour from whitish and yellowish to green, brown, and black, and in shape from spherical to elliptical and more or less compressed.

In Manchuria (Tiehling district), from which the best results are obtained, the yield per acre is from 1100lb. to 1600 lb.; the average height of the plant from two to three feet, with 42 to 105 pods per plant, each pod bearing from two to three seeds.

The fact that the flowers are self-pollinated makes the yield entirely independent of insects, and renders the soy bean free from an important obstacle in the way of the introduction of many legumes into new regions. A crop of seed is ensured wherever conditions are such as to allow the plants to make the proper vegetative growth and reach maturity.

Experiments in the cultivation of the soy bean are being conducted in practically every British colony; during the year 1909 experiments were conducted in the Argentine Republic, Mr. A. Grenville Turner, the soy bean expert, reporting that a crop of beans may be secured in about thirteen weeks, as against six months in Manchuria. Extensive experiments are being made with the bean throughout the United States of America, and in the near future shipments may be expected from Ceylon.

According to Turner there are over 300 varieties of soy beans which are distinguished largely according to the colour, size, and shape of the seed, and the time required for the plants to reach maturity. They also differ more or less in the habit of growth and in the character and degree of the hairiness of the various parts of the plant.

In Japan it has succeeded on soil of a medium texture. It also succeeds on comparatively light soils, often giving an abundant crop on soils too poor to grow clover. Good results have been obtained in Europe on a very great variety of soils, and similar results have been obtained in the United States of America. In South Carolina the soy bean gives excellent crops on sandy, limestone, or marly soils, and also on drained swamp or peaty lands that are well marled.

Soy beans are very drought resistant, which was amply borne out during the experiments conducted during season 1910-1911 in South Africa, the drought being characterised as the worst for about forty years; they are also capable of enduring slight frosts, also of withstanding an excess of moisture, being superior even to maize or cow-peas in this respect.

While the soy bean is possessed of excellent drought-resisting powers, it at the same time seems to be able to survive a period of excess of moisture better than maize. Generally speaking, it requires about the same temperature as maize.

In South Africa at the Government experimental farms, as high as 2000lb. per acre was recorded, while in many instances the yield was well over 1000lb. per acre. In Manchuria the yield per acre is from 1100 to 1600lb. per acre.

The amount of forage from the soy bean will, of course, vary largely according to the conditions under which the crop is grown. Under favourable conditions as much as 12 or 13 tons of fresh fodder may be produced per acre, which may be used for hay or for silage purposes.

Growing soy beans for the grain is distinctly profitable, owing to the large demand in the United Kingdom and Europe. The feeding value of the grain is very high, being superior to cotton-seed meal. The grain is rich in protein, and is best fed in conjunction with maize. A bushel of soy beans is at least twice as valuable for feed as a bushel of maize. As the grain is hard, it is usually desirable to grind it into meal for feeding. This is best done by mixing with maize before the grinding, to prevent gumming up the mill.

Very large quantities of soy beans are imported by Japan for planting and ultimately ploughing under as a green manure crop. It is estimated that the cash value of the essential fertilising ingredients (nitrogen, phosphoric acid, and potash) contained in a ton of green soy bean fodder would be about 10s. 4d.

Feeding Value.

For Sheep.—Experiments have been made to test the value of soy bean seed for fattening lambs. In one experiment two lots of ten lambs each were fed on the same roughage. One lot received shelled maize and whole soy beans in equal proportions, while the other received the same quantities of shelled maize and whole oats. The average gain of each lamb during a period of twelve weeks was 16·3 pounds when soy beans constituted a part of the ration, and but 13·7 pounds when oats were used.

For Dairy Cows.—Soy bean meal and cake has been found a most excellent feed for dairy cows, comparing soy meal and cake and cotton-seed meal, using the same ration of each. The quantity of milk produced from the soy bean ration was larger. The butter from the cows fed cotton-seed meal was of a firmer texture, but not nearly as good otherwise as the butter from the cows fed soy bean meal and cake.

For Hogs.—Experiments have been made to compare soy bean meal and wheat middlings for pork production in three separate experiments in as many years. Two-thirds of the grain ration was maize in each case. In each of the experiments the largest gains were made on the soy bean rations. Soy beans proved about ten per cent. superior to wheat middlings for pork production, figuring the costs of the feeds as the same.

Chemical Analyses.

Chemical analyses of the beans made in Europe show considerable variation in the percentages of the different constituents :—

Albuminoids	34 to 41·17.
Carbohydrates	19 to 28·80
Oil	15·62 to 23·20.
Fibre	3·30 to 5 70.
Water	9·10 to 12·80.
Ash	4·65 to 6.

The high oil content is the highest recorded, the beans were grown by Mr. Turner at Sierra Leone (West Africa). Mr. Turner reports that the next maximum percentage of oil was from soy beans raised at Umtwalumi, in Natal, showing 22·19 per cent. from beans grown from Manchurian seed, while the average oil content determined from a large number of samples from different parts of the Union of South Africa was 20 per cent. The beans beside the oil contained about 30 to 40 per cent. of casein. A sample of the oil extracted with ether by Morawski and Stingl gave 0·22 per cent. of unsaponifiable matter, and 2·28 per cent. of free acid calculated to oleic acid. The proportion of solid fatty acids in the oil is approximately 11·5 per cent. of the total mixed fatty acids. Lane found 80·26 per cent. of liquid fatty acids. The bulk of the solid fatty acids is stated to consist of palmitic acid ; the liquid fatty acids consist of oleic and linolic acids. On exposure to the air it dries slowly with formation of a thin skin.

Samples of South African soy beans were valued at 2/6 per ton more money than Manchurian.

Uses of the Bean.

Human consumption, as a vegetable, like marrowfat peas, and in preparation of soups. As a substitute for meat, specially manufactured. Preparations of macaroni As flour for biscuits and brown bread. As artificial cream, and milk. Manufacture of cheese. As a substitute for coffee. Preparation of plastic substances and artificial horn. Special biscuits and food manufactured for persons suffering from diabetes, as the beans contain no sugar or starch. As a basis in the manufacture of sauces—such as the famous soy sauce.

The beans are ground into meal for feeding cattle. In the United States the beans are fed to stallions instead of the ordinary horse-bean (*Vicia faba equina*). In Europe the bean cake is largely used for feeding dairy cows and cattle. In Manchuria and Japan it is fed to cattle, horses, mules, and hogs.

For the expression of oil and manufacture of oil cake. In China the bean cake is used as a fertiliser in sugar plantations and in the rice fields. In Japan the cake is used as manure for wheat and various other crops, even for cabbages, planted with the seed. In Japan the beans are grown and ploughed under as a green manure crop, as well as being consumed in the preparation of human food on a large scale, which practice is spreading to Western Europe.

Uses of Oil.

Manufacture of dynamite and high explosives, soap, linoleum, indiarubber substitute, margarine, paints and varnishes in place of linseed oil, edible goods and toilet powder, waterproof cloth, paper umbrellas, and lanterns, salad oil, lubricating oil, in China for greasing axles and native machinery; lamp oil, instead of kerosene oil, it is used on English railways for burning.

The soy oil is also used for preserving sardines, and in place of lard and cotton-seed oil for cooking.

Market Prices.—At the latter end of the year 1908, the soy beans started to be exported from Manchuria to Great Britain and Europe ; the price in the London market being £4 15s. per ton, which recently rose to £9 2s. 6d. per ton in England ; the value on the spot at Hull being now (Jan., 1914) given as £8 7s. 6d. per ton, the value of soy oil on the spot, crushed, is £24 10s., and extracted £23 15s. per ton, and of soy oil-cake £6 15s. per ton.—*South African Agricultural Journal.*

Alleged Fraud in Requisitioning Horses.

Before a special sitting of the Biggleswade (Beds.) Magistrates on Monday (H. M. Lindsell, Esq., C.B., in the chair, and Alfred Inskip, Esq.), Edward Massey Kinsey, Shefford, Beds., was charged with obtaining horses by false pretences.

Mr. W. W. Marks, Clerk of the Peace, represented the prosecution, and Mr. J. F. Eales defended.

Capt. W. Eyre Matcham, Assistant Director of Remounts, Eastern Command, gave evidence that Kinsey had no authority to purchase horses for the Goverment in any part of Bedfordshire.

Ephraim John Roberts and Daniel Herbert Hale, the two victims of the alleged frauds, described how Kinsey, having represented himself as a "Government man," obtained the horses at deflated prices. Both witnesses believed, in selling horses which they would rather have kept, that they were doing a patriotic action. In cross-examination, Webb said that Kinsey asked if a good price would tempt him when he said he did not wish to sell any horses. He (witness) replied "It might." Mr. Eales later remarked that this did not savour of patriotism. From Roberts he ascertained that he was satisfied with a cheque for £28.

In reply to the Chairman, both Roberts and Webb said that they were under the impression from the beginning to the end of the transaction that their dealings were with a "Government man."

Mr. Marks called a large number of witnesses, farmers, market gardeners, and small holders, to show that the same system was practised in every case, with failure in several. All the witnesses were subjected to severe cross-examination. In two or three cases, it appeared, Kinsey employed a man named Sutton Matthew, to requisition horses. In most instances the story was told that a colonel and officers were to inspect the horses on a certain day and time.

Henry John Sutton Matthew, Holly Lodge, Shefford, said he had known Kinsey all the time he had been in Shefford. On August 16 Kinsey called to see him about buying horses. He said he had been round that afternoon with two officers, buying horses for the Army, and he asked if he (witness) knew of any suitable horses. He asked about the class of horses required and on what terms he should obtain them. Witness asked for five per cent. on the purchase price, but Kinsey said it was too much. Eventually, Kinsey agreed to pay him half the profits. On Monday he again called and asked if witness would drive him round and this he agreed to do. They went to Mr. Hale of Clifton, Mr. Brown, of Meppershall, Mr. Roberts, Meppershall, and Mr. Webb. He probably mentioned Army officials in the same way to these men as he was led to believe by Kinsey. Kinsey had told him that he had left the telegram from the colonel at home, but he thought the name of the colonel was either "Hanset" or "Hansel." In consequence of what he subsequently saw and heard he sent for Kinsey on Wednesday, but he called early on Thursday, August 20. Witness told him he had behaved in a very ungentlemanly way and that he (Kinsey) had put him in a false position. At his (witness's) request Kinsey gave him a written document exonerating him from all blame in the horse transactions. The document, signed by Kinsey, was as

follows: "I certify Mr. Sutton Matthew, of Shefford, is in no part answerable in my transactions, which were not direct from any authority of the War Office.

Police-Sergeant Golder spoke to having seen Kinsey as the result of a complaint he received from Roberts. At that interview Kinsey said the horses were going up to London and the best of them would be picked out for the use of the Army. In another interview witness asked him on what authority he had told the people he had seen to bring horses to shefford. He replied "I know I have done wrong in one or two places, and I have been to see the people and made it all right with them."

Police-Sergeant Pedley said he arrested Kinsey on a warrant charging him with obtaining a horse by false pretences from Ephraim John Roberts. When he saw Kinsey at the house Mrs. Powell came up, and Kinsey said "They are arresting me on that horse job." At that time he had not told Kinsey what the warrant was for He said, "I was as innocent as the devil." (Mr. Marks: Just about). He said again "This is my first conviction. (Mr. Marks: "He was anticipating.") It is only a matter of spite and arises through dealing with people who are not business men." On the following day Kinsey was remanded and, on the way to the police station, he said, "You will lose your case. I have read of several of the same sort and they were all dismissed. I have read of one in the paper in Cheshire. Had I known this was coming on I should have cleared out. I have been endeavouring to obtain an appointment in the Army as a veterinary surgeon." When witness searched defendant at Biggleswade police-station he found a cheque, a cheque book, another document, a postcard, and a label.

Mr. Eales held that there was no case against Kinsey on the charge of defrauding Mr. Hale. They had to look at the dominant motive that induced Mr. Hale to part with the horse. The "patriot" was tempted when he was asked "Would a good price tempt you?" for he replied "It might." That did not saviour of patriotism. Was he induced to part with the horse because he thought Kinsey had authority to buy it? He was told to put his own price on it; that was not commandeering. When the Army commandeered horses the prices were fixed for the owners by the Army officials. On that charge there could be no question for a jury to decide.

The Chairman said he did not think that court was a fit and proper place to decide such a point. It was a case for the jury. He held, in spite of what Mr. Eales might say on either of the two charges, that a *prima facie* had been made out, and, that being the case, he did not think it necessary for Mr. Eales to call the defendant or his witnesses.

Kinsey was committed to the Assizes, to be held at Bedford on Friday, October 16. Bail was allowed in the same sums as hitherto—Kinsey £200 and two sureties, Mrs. Powell and Dr. Johnson, £100 each.

In reply to the charge, Kinsey said "I am not guilty." I do not propose to give evidence or call my witnesses to-day."

Distilled Water and Bacterial Injections.

The intravenous injection of distilled water in quantity has previously been shown greatly to accentuate the lethal action of *B. Typhosus*. Experiments since performed in the bacteriological laboratory of the Lister Institute show that the same occurs with cultures of the cholera vibrio, and also with its toxin freed from organisms; with *Proteus vulgaris*, *B. pyocyaneus*, *B. dysenteriæ*, *B. prodigiosus*, and with fowl cholera. In many cases the injection was followed by sudden death. The toxicity of tuberculin was also slightly increased. Non-bacterial poisons, such as potassium cyanide and strychnine, were not rendered more lethal. The results are similar if the water is given before or after the bacterial injection; and if the toxin be given in other ways than by intravenous injection, it is equally fatal. Injection of lysed blood in small doses acts in a similar manner. The lysis of the red blood-cells by the distilled water is probably an important factor in its effect in sensitising the organism to bacterial poisons.—W. S. Penfold and H. Violle (*British Med. Journ.*)—*Pharmaceutical Journal.*

Vanilla Seeds Simulating the Eggs of Intestinal Parasites.

A curious case, indicating the caution requisite in drawing definite conclusions from insufficiently observed data, is narrated. In the course of the microscopical examination of the fæces of a patient a number of small ovoid brownish bodies were observed, which at first sight were thought to be the eggs of an intestinal parasite, such as *Fasciola opistorchis*, or *Botriocephalus*, which they resembled after the disappearance of the operculum. A specialist went so far as to diagnose them as the eggs of some unknown species of intestinal worm; another suggested that they might be minute vegetable seeds. The latter suggestion put the author on the right track. The "eggs" were soon identified as vanilla seeds. The question then arose as to how the patient, who denied having taken any article of food flavoured with vanilla for over a year, could have swallowed these seeds. It was found that she was accustomed to drink a certain brand of oatmeal cocoa. This was examined, and was found to contain vanilla in powder, and was the source of the seeds.—Bourgeon (*Bull. Fed. Synd. pharm. d'Est*, 1913, *Répertoire*, 1913, 25, 536).—*Pharm. Journal.*

Treatment of Warts.

Dr. F. Szontagh, writing to *The Lancet* of March 14, mentions a new simple method of treating warts. This consists in covering the wart and the surrounding skin, to the width of 1 centimetre, with ordinary caoutchouc plaster, and leaving it so covered for weeks—even, if necessary, for two or three months. Whenever the plaster becomes loose it must be removed and replaced by a new piece. As a rule, the plaster is to be changed once in three or four days. Any adherent residue of the caoutchouc is to be removed with ether or petrol, care being taken that the wart or the surrounding skin shall not be rubbed energetically, because irritation of the skin is not conducive to the disappearing of the wart. The author offers no explanation for the action of this simple method, and how it produces such excellent results from the cosmetic point of view, unless it is that the caoutchouc contains some substance which softens the wart and causes atrophy. but it is certainly efficient.

The General Show Committee of the Smithfield Club have passed the following resolution:—"The Committee is of opinion, having regard to the preparations which have already been made by exhibitors, that the show should be held as usual." The dates of the show are from December 7th to 11th.

The A.V.C. and the Milk and Dairies Act.

The Milk and Dairies Act, according to its terms, comes into force on 1st January, 1915. An anonymous writer in the *Glasgow Herald* points out, and rightly, that there are three solid reasons why this date is most undesirable. In the first place, it is impossible for the local authorities to discharge in an adequate way the duty of appointing veterinary inspectors. Many of the gentlemen best qualified for these posts are at the moment serving their country in the army. It is simply impossible in many districts to make the appointments required by the Act. In the second place, the Tuberculosis Order has been suspended, and it was ever represented that the Milk and Dairies Acts were to be worked in co-operation with that Order. So far as some of the provisions of these Acts are concerned, it is simply impossible to operate them while the Order to which they are correlated is in abeyance. In the third place, the sanitary authorities recognise that much additional work has been put upon them, and that the issue of that work may be the fixing of a new standard. All this takes time and close attention, and therefore, on every ground, it does not seem unreasonable to ask that the date when the Act comes into operation should be postponed.

"Facts about Vivisection."

At Bow Street Police Court, on Tuesday, Miss Beatrice Ethel Kidd, Secretary of the British Union for the Total Abolition of Vivisection, was fined £10 10s. and costs for dispersing and assisting to disperse a book entitled "Facts about Vivisection"—purporting to be a report of the Inspector under the Vivisection Act for 1912 issued by the Home Office—without having the name and address of the printers upon it.

Mr. R. D. Muir, who appeared to prosecute, described the book as a public mischief. It had all the appearance of a Government report and contained statements about vivisection experiments which were in flat contradiction to the actual report of the Inspector.

For the defence it was submitted that the printers were the only persons liable to prosecution, and the Magistrate consented to state a case on the point.—*The Times.*

Indian Gram.

At the monthly meeting of the Advisory Board of Agriculture (S. Australia) held on Wednesday, June 10:

A fodder known as gram was brought under notice by the Secretary, who explained that, having seen references to it by Capt. H. Parsons (Secretary of the Inman Valley Branch of the Bureau), he had written to that gentleman and obtained the seeds and dried plants produced. The following report on the fodder had been courteously prepared and furnished by the Government Veteterinary Lecturer (Mr. F. E. Place), who had spent many years in India:—

"Gram (*Cicer aricitnum*) is a legume, practically a pea bearing two seeds in a pod. The plant is deep rooting, bushy, and spreading, with purple flowers, and reddish-brown or yellowish seed. It is extensively grown in India, where it is the chief fodder and grain for horses. It attracted the notice of Capt. Parsons, when he was at Sialkete on duty with the 17th Lancers, and he brought a few seeds home aud grew them at Inman Valley. The sample of seed was of decidedly poor quality. In the parts of India where the temperature and rainfall approximate to the conditions in the north of this State, gram usually follows a green crop such as mustard, and is sown after the rains in September, and ripens for harvest in April and May. The Sout Australian conditions would probably be—seeding in July and August, and harvesting in December or January. The Indian system is too crude for adoption in South Australia, where the crop would be treated, as regards tillage and seeding, in the same way as peas. A 10-bush. crop is good in India, but Capt. Parsons estimates, from his own experience, that quite double that yield would be obtained, under favourable conditions in South Australia. The accompanying analysis of the gram shows that it has a very high feeding value, being rich in fat, which food component is notably lacking in South Australian fodders, and the presence of which is so necessary to ward off paralysis, dry bible, and diseases of similar character. When gram is described as a badly-balanced food the condemnation is rather in its favour, because of its high nitrogen content. The feeding ratio, however, may be easily balanced by giving hay with it, or, if used as a green fodder, adopting the Indian plan of growing a mixed crop of gram and barley, wheat, or oats. No doubt the custom of mixing the crop facilitates harvesting by keeping the plant upright. The percentage composition of gram is:—

Water	10·86	Carbohydrates	69·11
Proteids	21·17	Salts	3·39
Fat	4·47		

A draught horse would do well on 8-10lb. of gram and 20lb. to 25lb. hay daily.

The Board decided to send the report (which included notes on experimental cultivation by Capt. H. Parsons) to the Hon. the Minister.—*Journal of Agriculture, S. Australia.*

ARMY VETERINARY SERVICE

Extract from *London Gazette*,

WAR OFFICE, WHITEHALL, Sept. 25.

TERRITORIAL FORCE. ARMY VETERINARY CORPS.

Capt. W. Logan to be Major. Dated Aug. 5.
Lieut. A. N. Foster, F.R.C.V.S., to be Capt. Dated Sept 2.
Lieut. J. J. Ridley to be Capt. Dated Sept. 7.
F. B. Ditmas to be Lieut. Dated Aug. 7.

Sept. 29.

TERRITORIAL FORCE. ARMY VETERINARY CORPS.

J. W. H. D. Serjeant to be Lieut. Dated Sept. 30.
Lieut. A. E. G. Batt to be Capt. Dated Sept. 30.
H. C. Taylor to be Lieut. Dated Aug. 20.
R. Bryden, F.R.C.V.S., tobe Lieut. Dated Sept. 14.
E. E. C. Maclachlan to be Lieut. Dated Sept. 30.

Sept. 30.

J. Donaldson to be Lieut. Dated Oct. 1.
Squad-Sergt-Maj. J. F. Player to be Lieut. Dated Oct. 1.

The following casualties to officers of the Expeditionary Force have been officially reported: Officers previously reported wounded, now reported as having died of wounds:—

* * *

Lieut. S. K. Jones, Army Veterinary Corps.

The following casualties to officers of the Expeditionary Force have been officially reported:—

* * * *

Killed.—Lieut. V. Fox, Army Veterinary Corps.
[Lieut. Fox was gazetted last month].

OBITUARY

Capt. J. A. Worsley, M.R.C.V.S. (Retired C.M.R.) G.V.S. Cape Light Horse Defence Force, S. Africa.
Graduated, Lond: March, 1887.

It is with regret we have to record the death of Capt. James Arthur Worsley, M.R.C.V.S. A typical Englishman, he was born in Kent some 47 years ago, his father being yeoman. Qualifying professionally at London in 1887, he subsequently came out to South Africa, and was attached to the C.M.R. at Umtata. After the Anglo-Boer War, meanwhile obtaining his Captaincy, he was transferred from the regiment into the Department of Agriculture, acting as Veterinary Surgeon at Butterworth. On the outbreak of the present European War, he was put on active service, joining the Camp at Prieska. On Friday morning, Aug. 21, he was found dead in bed, the cause evidently being heart failure. Looking well when he left Butterworth, his unexpected death is all the more regretted by a large circle of friends, and not least by his professional brethren in Umtata and district, who held him in high esteem. The late Captain is survived by his wife and a young family, for whom much sympathy is being expressed.—*The Territorial News* (S. Africa).

Stuart Kirby Jones, M.R.C.V.S., Lieut. A.V.C. (S.R.)
Pembroke. Liverpl: July, 1911.

Foulds & Hibberd, Photo.,
33 Sandy Road, Seaforth, Liverpool.

Lieut. Stuart Kirby Jones, M.R.C.V.S., A.V.C.

In the list of gallant Britons who have fallen on the field of battle in this great struggle for the cause of justice and humanity we note with great sadness the name of Lieut. Stuart Kirby Jones, M.R.C.V.S., A.V.C., who was Veterinary Officer in charge of 25th Brigade of Royal Field Artillery, which went out as part of the Expeditionary Force. He was wounded in what will be known in history as "the battle of the Aisne" on the 15th Sept., and succumbed to his wounds in hospital, and was buried at Versailles with full military honours on the 21st.

Lieut. Kirby Jones who was twenty four years of age was the youngest son of the late Mr. William Jones dental surgeon of Liverpool, was educated at the Liverpool Institute and subsequently at Liverpool University Veterinary Department, where he made a brilliant career, winning gold and silver medals, and graduated from that school in 1911. He afterwards went through a course of training at the Army Veterinary School at Aldershot; he served his pupilage with Mr. R. S. Rowlands, Abergele.

He will be sadly missed by a wide circle of relatives and friends amongst whom his genial and open disposition had made him very popular. His kindness and self-denial knew no bounds: he was resolute, and possessed of a big share of moral courage. He was a keen athlete and a winner of several valuable prizes in that capacity. A widowed mother, a sister, and three brothers are left to mourn the death of a true Briton—sacrificed for King and country—and we may well say in the recent utterance of an eminent statesman that "has had a consecrated death."

Vincent Fox, M.R.C.V.S., Lieut. A.V.C.
Dublin: December, 1911.

On September 16th, after a very short illness, Dr. George Gresswell of Louth. While in South Africa in the early eighties, as lecturer in physical science in one of the constituent colleges of the University of Capetown, and before he joined the medical profession, Dr. George Gresswell published an essay containing a considerable number of interesting facts on the subject of snake poisoning in South Africa, and some ten years later issued several books dealing with the disorders of animals. One of them, entitled the *Veterinary Pharmacopœia and a Manual of Comparative Therapy*, reached a second edition in 1903.

TWO GRUMBLES.

Dear Mr. Editor,

I have two grumbles to bring before the profession.

Firstly, I read in a public paper that the A.V.D. has accepted a hospital for wounded horses from the R.S.P.C.A. staffed by *Inspectors* who have proceeded to Paris to open it.

I volunteered for the A.V.D. with a seventeen years record in Government service, and am informed "nothing to offer you." Why?

Secondly, whilst approving of signing agreements for locums and assistants not to practice in the owner's interests, I venture that something should be said for the locum or assistant and a week or fortnight given him to sample the employer and practice as to their suitability before binding himself not to engage or start himself in the district. There are others.—Yours truly,

One who is Uncomfortable.

A Correction.

Last week's issue, p. 187, "Purpura (?) in the dog," first line, "variety" should read *rarity*. The same error recurs under *Diagnosis*, second line.

Original articles and reports should be written on oneside of the paper only and authenticated by the names and addresses of writers, not necessarily for publication.

Communications for the Editors to be addressed
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